



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 903,815	07-13/2001	Taizo Iwami	019519-315	1800

7590 07-16-2003

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

DONOVAN, LINCOLN D

ART UNIT	PAPER NUMBER
----------	--------------

2832

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/903,815

Applicant(s)

Iwami et al.

Examiner

Lincoln Donovan

Art Unit

2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jul 13, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2832

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figure 5 must be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, lines 3-4, applicant should clarify what is intended by "unmagnetized permanent magnets." In lines 4-5, the arrangement of the magnets being at "specified intervals in the circumferential direction..." is unclear. In line 6, applicant should clarify whether the "a rotor" is

Art Unit: 2832

intended to be "the rotor" in line 1. In lines 7-8, applicant should clarify what is intended by "a desired one of the permanent magnets." In line 8, applicant should clarify the specific location of the permanent magnets relative to the polarizing iron core. In lines 15-18, applicant should clarify the specific movement of the permanent magnet relative to the coils." It is not clear what applicant intends by the magnet being "relatively moved and each of the permanent magnets is magnetized to form a magnetic pole in turn by ..."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-6, as best able to be understood in view of the rejections under 35 U.S.C. 112, second paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Soeda et al. [US 5,200,729] in view of Tsukasa [JP409-163692].

Regarding claims 1 and 6, Soeda et al. disclose a polarizing device [figures 9a-10b] for a permanent magnet rotor [30] comprising:

Art Unit: 2832

- a polarizing iron core [30] arranged facing to a specified number of permanent magnet portions [figure 9a] at specified intervals in the circumferential direction on a peripheral surface of the rotor; and

- first and second coils [20a, 20b] wound at a position facing a selected one of the permanent magnet portions of the rotor.

Soeda et al. disclose the instant claimed invention except for the magnet portions being permanent magnets.

Tsukasa discloses a magnetizer for a rotating-field type permanent magnet motor having a rotor formed of discrete magnet segments [figure 3].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use discrete magnet segments for the magnet portions of Soeda et al., as suggested by Tsukasa, for the purpose of providing selective magnetization.

Regarding claims 2, Soeda et al. discloses the second coils arranged to face a plurality of magnet portions [figure 10a].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the coils face multiple magnets for the purpose of controlling the specific magnetization.

Regarding claims 3-4, the specific winding directions of the coils and number of turns used would have been an obvious design consideration based on the desired polarization.

Regarding claim 5, Soeda et al. discloses the use of notches in a magnetic polarizer [figure 12].

Art Unit: 2832

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use notches in the polarizer of Soeda et al., as modified, for the purpose of controlling the flux provided by the windings.

Conclusion

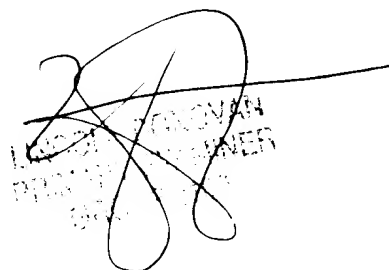
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lincoln Donovan whose telephone number is (703) 308-3111.

The fax number for this Group is (703)-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1782.

LDD

July 8, 2003



Handwritten signature of Lincoln Donovan, Examiner, with a circular stamp containing the text "LINCOLN DONOVAN" and "EXAMINER".